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US005901641A

United States Patent [19]

McNamara

[11] Patent Number: **5,901,641**
 [45] Date of Patent: **May 11, 1999**

[54] BAFFLE FOR DEEP FRYER HEAT EXCHANGER

[75] Inventor: **Albert Charles McNamara**, San Antonio, Tex.

[73] Assignee: **AFC Enterprises, Inc.**, Atlanta, Ga.

[21] Appl. No.: **09/184,719**

[22] Filed: **Nov. 2, 1998**

[51] Int. Cl.⁶ **A47J 37/00; A47J 37/12**

[52] U.S. Cl. **99/403; 99/330; 126/375; 126/391**

[58] Field of Search **99/403, 337, 338, 99/325-334, 404-410; 126/378, 375, 92 AC, 92 R, 390-392, 357, 360 R; 210/167, DIG. 8; 165/109.1; 219/492, 497, 506, 508, 442, 483, 486, 510, 512; 340/589; 426/233, 231, 438, 519, 305, 808, 302; 431/326, 170**

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[57] ABSTRACT

A heat exchanger for a fryer system has at least one heat transfer conduit having heating fluid passing therethrough. A baffle plate is disposed in the heat transfer conduit, defining a plane and having a first surface, an opposed second surface, and a longitudinal axis which divides the baffle plate into a first portion and a second portion. A plurality of tabs, each having a longitudinal axis, extend outwardly from the baffle plate. A crease is defined along the intersection of each tab and the plate. At least one tab is positioned in the first portion of the baffle plate and at least one tab is positioned in the second portion of the baffle plate. Webs separate adjacent tabs from one another in a direction substantially perpendicular to the longitudinal axis of the tabs. In certain embodiments, the crease of at least one tab forms an acute angle with a longitudinal edge of the baffle plate.

25 Claims, 6 Drawing Sheets

